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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,163	06/30/2000	Robert E. Fischell	JNJ3-00	2477

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EXAMINER

BUI, VY Q

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 02/26/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/609,163

Applicant(s)

FISCHELL ET AL.

Examiner

Vy Q. Bui

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

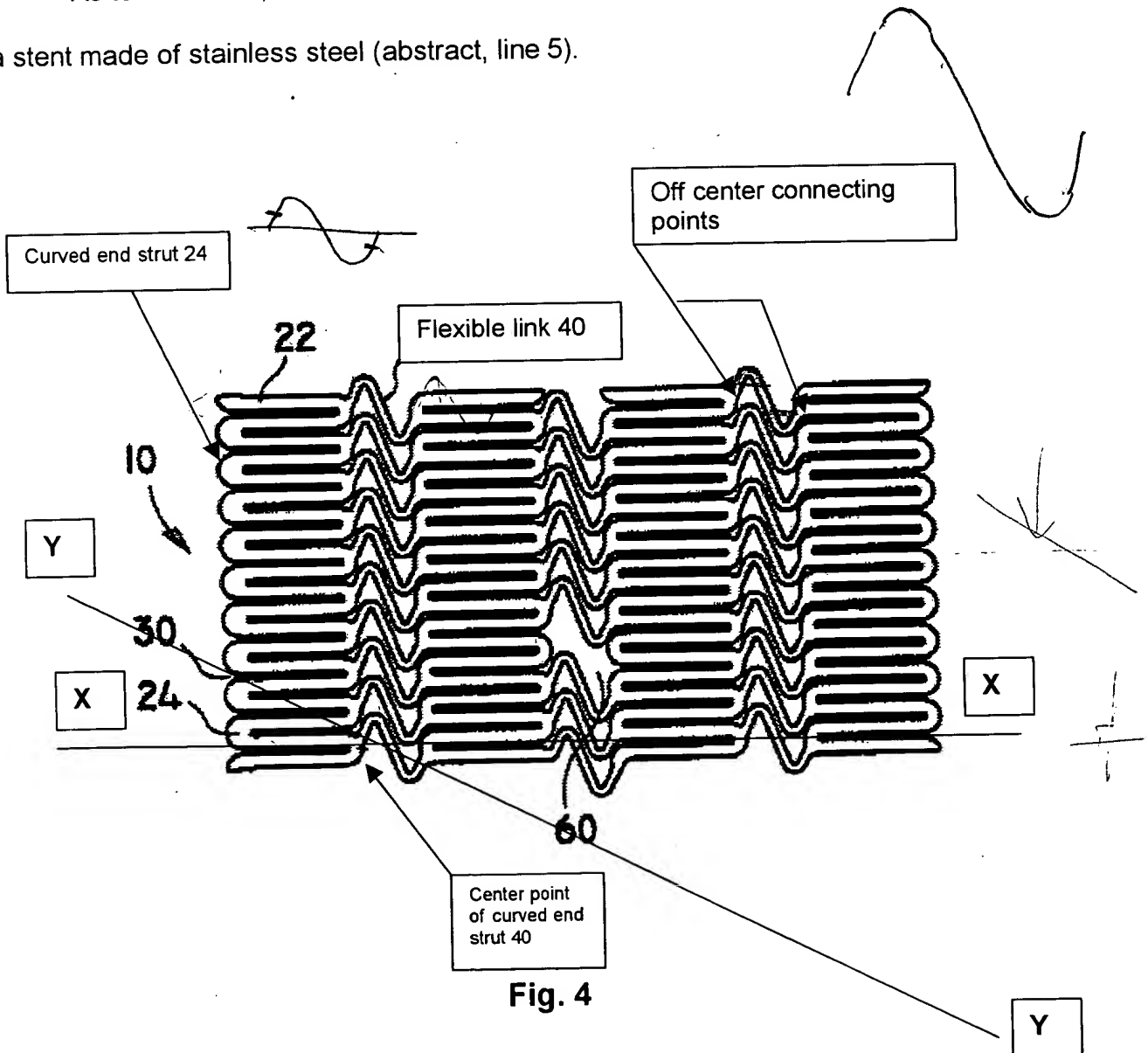
- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 50, and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over HESS et al-WO9840035.

As to claims 50, 53 and 54, HESS et al reference (Fig. 4 shown below) discloses a stent made of stainless steel (abstract, line 5).



The stent illustrated in Fig. 1-4 includes curved end struts 24 connected to associate curved end struts 24 by flexible links/wavy strips 40. **The connecting point of each flexible link/wavy strip to a curved end strut 24 is offset from the center point of the curved end strut 24.** HESS (Figs. 1-4) discloses that the flexible links/wavy strips connected to the curved end struts 24 as shown would at least provide greater axial flexibility for the stent and large perimeter side openings 50 for a side branching blood vessel access (lines 1-11, page 9). Although each flexible link/wavy strips 40 (as shown in Fig. 1-4) does not include at least four curved segments connected together in series by three generally circumferentially extending segments of approximately equal length as claimed, attention is directed to HESS et al reference (page 11, lines 10-14). The HESS reference discloses that the flexible links 40 can have various configurations such as a sine wave shown in Fig. 12a-b having one or more repeating portions 102. In view of these explicit teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flexible link 40 illustrated in Fig. 4 to have at least four curved segments being connected together in series by three generally circumferentially extending segments of approximately equal length as claimed, which would form N-shaped flexible links, for this configuration would provide an axial flexibility to the device and large openings 50 for a side branching blood vessel access.

2. Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over HESS et al-WO9840035 in view of RICHTER-5,807,404.

In regard to claim 51, each flexible link 40 of HESS appears to be thinner than each curved end struts. Should the Applicant contends that HESS et al does not clearly teach each flexible link 40 having a width less than a thickness of each curved end strut, attention is directed to the RICHTER-5,807,404 reference which discloses a stent (Fig. 1) with flexible links 8', 9' having width less than the width of each curved end struts for more flexibility at the end of the stent. In view of RICHTER-'404, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the outer most flexible links 40 of HESS et al to have a width less than the width of each curved end strut 24 to enhance flexibility at each end of the stent to enhance the flexibility thereof.

As to claim 52, the HESS et al reference differs from that claimed by not reciting the ratio of thickness to width of each flexible link 40 of HESS et al being greater than 1.0. However, the RICHTER reference discloses that one can change a section's flexibility of the stent by changing the gauge of the material or by changing dimensions of sections to achieve the desired flexibility (see column 1, lines 60-66). For the curved end struts which have the same thickness and width, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to make each flexible link 40 of HESS et al having the width less than its thickness or the ratio of thickness to width of each flexible link 40 is greater than 1.0 so that the flexibility of the stent at each link's section will be enhanced.

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3. Claims 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over RICHTER-5,807,404 in view of HESS et al-WO9840035.

In regard to claims 50 and 54, RICHTER discloses a stent having flexible links (8', 9', 8"', 9'''). The flexible links can be made in a variety of different shapes, such as "Z" or "S" (column 6, lines 2-8) to vary the flexibility at the ends of the stent, and the links' dimension can be modified to achieve a desired flexibility. Although the links do not have at least four curved segments as claimed, attention is directed to the HESS et al reference which discloses flexible links 40 (see Fig. 12b) of various configurations such as shown in Fig. 12a-b. The links can have one or more repeating portions 102 to achieve a desired flexibility of the stent. In view of the teachings of HESS et al, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the RICHTER's flexible links to have one or more repeating portions 102 such as "at least four" to enhance the flexibility at the ends of the stent. In so doing the link would be in a letter "N".

In regard to claim 51, the links (8', 9', 8"', 9''') have a width less than the width of each curved end struts.

In regard to claim 53, see column 5, lines 45-48 (RICHTER).

Response to Arguments

The Response filed on 12/7/2001 by the Applicants under 37 CFR 1.131 has been carefully considered but is not persuasive.

The Applicants contend that the combination of current references in the previous rejection lack a motivation.

On the contrary, for example, HESS (Figs. 1-4; Figs. 12A-12b; lines 1-11, page 9 and lines 10-14, page 11) explicitly teaches that the HESS stent would provide axial flexibility and large perimeter side openings 50 for a side branching blood vessel access when HESS stent is configured so that:

1. each connecting point between each flexible link/wavy strip 40 and each associated curved end struts 24 is offset from the center of the curved end struts as shown in Figs. 1-4 (HESS reference).
2. each flexible link/wavy strip 40 can be configured as a multiple wave-shaped strips as shown in Figs. 12A-12B (HESS reference).

Accordingly, HESS teaches substantially all the main features of the present invention as claimed including the reasons or motivation for such a configuration of the stent.

The rejection remains based on the same references as applied in the previous "Office Action".

Conclusion


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is (703) 306-1382.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano, can be reached at (703) 308-2496. The fax number for this Unit is (703) 308-2708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist at (703) 308-0858

VQB 
February 22, 2002.


MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700